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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,393	04/02/2004	Cameron Kerrigan	50623.00381	2921

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Squire, Sanders & Dempsey L.L.P.
Suite 300
1 Maritime Plaza
San Francisco, CA 94111

EXAMINER

CHANG, ROSIE YUH LOO

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/817,393

Applicant(s)

KERRIGAN, CAMERON

Examiner

ROSIE YL CHANG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/22/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-7, and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al. (US 6,214,115).

As for claims 1 and 15:

Taylor et al. ('115) teach a method of coating a stent (col. 1, line 24). The stent of Taylor et al. ('115) is inserted over a mandrel having a hollow tubular body and pores disposed on a surface of the mandrel, the pores extending through said tubular body (col.1, line 27-28; 42-45). A coating solution is applied to the stent and a vacuumed pressure is applied to the hollow tubular body for extracting some of the coating solution that is applied to the stent (col. 2, line 63 to col. 3, line1).

As for claims 5, 7 and 15:

Taylor et al. ('115) further teach the stent mounted on the mandrel is affixed on said mandrel by two collars (col. 1, line 49-53). Therefore, the mandrel of Taylor et al. ('115) includes a collar, i.e. support member to contact a first end of the stent, another collar, i.e. a lock member, to contact a second end of the

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stent and the outer surface of said mandrel contacts an inner surface of said stent.

As for claim 14:

Taylor et al. ('115) further teach that once said stent is coated then it is removed from the coating solution reservoir, subsequently a vacuumed pressure is applied to the stent through said mandrel to remove excess coating solution on the stent, consequently the amount of the coating substance on the stent been modified (col.2, line 62 to 67).

As for claims 6 and 16:

Taylor et al. ('115) further teach an alternative support design for coating a stent by applying a plastic sheath have spiral slots formed around its out surface, which is placed around the external periphery of said mandrel (col. 3, line 17-23). Therefore, the inner surface of the said stent does not make direct contact with an outer surface of said mandrel.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 11-13 are rejected under U.S.C. 103 (a) as being anticipated over by Parsons et al. (US 6,521,284) in view of Villareal (US 6,605,154).

Parsons et al. ('284) teach a method of coating stent (col.9, line 12) in a controlled process. The stent of Parsons ('284) is mounted on a mandrel, which has a hollow body and pores on the surface (col.5, line 14-15), the said mandrel being in communication with a pressure device receiving pressure (col. 5, line 5-7) to modify the coating substance that being applied to said stent. Parsons et al. ('284) further teach two spacers being used to maintain said stent above the outer surface of said mandrel (col. 5, line 21-22), therefore, the inner surface of stent does not make contact with outer surface of the mandrel. In another example, Parsons et al. ('284) teach that if said stent is placed directly on the outer surface of said mandrel, the spacers are not required (col. 5, line 30-31). However, Parsons et al. ('284) fail to teach rotating the stent while applying a coating substance thereto.

Villareal ('154) teaches a method of coating stent (abstract) in a controlled condition. The stent of Villareal ('154) is mounted on a mounting assembly include a support member, a mandrel, and a lock member which rotates along stent longitudinal axis (col. 3, line 11-16) during the coating process.

Parsons et al. ('284) and Villareal ('154) both concern the surplus coating substance build on the surface of a stent, and Parsons et al. ('284) remove the excess coating substance by collecting it with a vacuum system as disclosed in the above, and Villareal ('154) removes the excess coating substance by rapid rotating the coated stent to spin off some of the surplus coating (col. 5, line 7-8).

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Villareal ('154) further teaches the excess coating can also be vacuumed off of the surface of the stent (col. 5, line 8-9). Therefore, it would have been obvious to one of ordinary skill in the art to use the invention of Parsons et al. ('284) in the coating method of Villareal ('154), to effectively control the coating process.

Claims 2-4, 6, 7-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al. ('115) in view of Villareal ('154).

Taylor et al. ('115) teach that which is disclosed in the above. Taylor et al. ('115) is silent concern with rotating the stent about its longitudinal axis during the coating process.

Villareal ('154) teaches that which is disclosed in the above. Villareal ('154) further teaches the coating composition can include a solvent and a polymer dissolved in the solvent (col.5, line 21-22) and which is applied by spraying onto the stent (col. 4, line14).

Villareal ('154) further teaches the said support member contacting a first end of the stent, the said lock member contacting a second end of the stent, the tubular mandrel connecting the said support member to the said lock member (col. 3, line 51-53), wherein the said support member and said lock member prevent an outer surface of said mandrel making contact with an inner surface of the stent (col.3, line 34-36). In another embodiment, Villareal ('154) teaches the support member penetrates at least partially into the first end of the stent and /or the lock member penetrates at least partially into the second end of the stent (col. 3, line 35-40).

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Taylor et al. ('115) and Villareal ('154) both concern the excess coating substance build on the surface of a stent, and Taylor et al. ('115) remove the excess coating substance by collecting it with a vacuum system as disclosed in the above, and Villareal ('154) removes the excess coating substance by rapid rotating the coated stent to spin off some of the surplus coating (col. 5, line 7-8). Villareal ('154) further teaches the excess coating can also be vacuumed off of the surface of the stent (col. 5, line 8-9). Therefore, it would have been obvious to one of ordinary skill in the art to use the invention of Taylor et al. ('115) in the coating method of Villareal ('154), to effectively control the coating process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROSIE YL CHANG whose telephone number is 571-272-6466. The examiner can normally be reached on MONDAY TO FRIDAY 7: 00AM TO 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY MEEKS can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


KEITH HENDRICKS
PRIMARY EXAMINER